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This post Mr. De la Rue resigned in 1882. In 1872 he was President of Section A of the British Association. He was one of the founders of the Royal Microscopical Society. He was a corresponding member of the French Académie des Sciences for the department of astronomy; also of the Imperial Academy of Sciences, St. Petersburg, the Philomathic Society of Paris, the Royal Society of Upsala, the Society of Agriculture and Commerce, Caen, the Society of Natural Science, Cherbourg, and the Berlin Chemical Society. Three foreign Orders had been conferred upon him—Commander of the Legion of Honour, Commander of the Order of St. Maurice and St. Lazare, and Knight of the Order of the Rose, Brazil. Mr. Warren De la Rue retired from the firm of Thomas De la Rue & Co. at the end of 1880. E. B. K.

HARRY SAVILE WARD EVANS was born at Torquay on January 18, 1851. He was the younger posthumous son of William Bertram Evans, M.P. for Leominster, and Jane his wife, of Forde Abbey, Dorset, and Wimbledon Park House.

He was educated at Eton and Trinity College, Cambridge, where he graduated in the Moral Sciences Tripos in 1872. He was called to the Bar at the Inner Temple, but never practised. While at Trinity he was captain of the Cambridge University Volunteer Corps, and devoted great attention to rifle-shooting, and was for some years a member of the "English Eight" team at Wimbledon, and also of the British team when they competed in the United States against the Americans.

For the last seven or eight years he spent the greater portion of his time on a property he had acquired at Gulf Hammocks, Florida, U.S.A. He died in Paris, after a very few days' illness, on September 10, 1889.

He was elected a Fellow of this Society March 12, 1875.

CHARLES HOOD was born in 1805, and was the son of an ironfounder in Blackfriars. For many years after his father's death he and his brother carried on the business, from which he retired some time ago.

Mr. Hood attained considerable eminence in practical science. His researches into the chemistry of the combustion of coal gained for him the silver medal of the Society of Arts. He was consulted by the Government on the ventilation and warming of the new Law Courts, when, however, the work had proceeded too far to allow of his suggestions being adopted. His treatise on ventilation and warming by hot water is the standard work upon the subject. For this he was awarded the Telford Medal by the Society of Engineers. At the time of his death he was nearly, if not quite, the oldest Fellow of the Royal Society in date of election. He was one of the founders of the British Home for Incurables (chairman from 1861 to 1866), to which

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he was a generous donor. He also took an active interest in the management of King's College and Westminster Hospitals.

He was elected a Fellow of this Society January 11, 1833.

Robert Stirling Newall was born in Dundee on May 27, 1812. Though engaged in commercial business practically the whole of his life, his interests and talents were obviously of a kind that would have made him excel in purely scientific work, had the opportunity for the necessary early training and the external conditions presented themselves. He had a very keen power of observation, unusual patience and perseverance in research, a quiet persistence in following up a line which he knew to be correct in spite of prevalent opinion, and a great confidence in experimental methods. It was an opportunity for experimental work, afforded by Mr. Robert McCalmont, that induced him to give up work in Dundee, where his father's influence had gained him employment in a mercantile office. He came to London, and undertook for Mr. McCalmont experiments on the rapid generation of steam, and turned his mind to various other subjects of an experimental nature.

Always quick in devising mechanical arrangements, he readily seized upon a suggestion made by a friend who was studying mining in Saxony, and wrote that wire ropes of reasonable and efficient construction were greatly needed to take the place of the rough bundles of wire then used in the mining operations. Mr. Newall discovered the essential points in the construction of a good wire rope, and invented machinery to carry out the necessary operations.

In a short memoir in which the chief interest will be centred in astronomical subjects, the reference to Mr. Newall's interest in submarine telegraphy must be very brief, though he was occupied with the matter for at least fifteen years of a very active life. He received some of the first gutta-percha that reached this country; he suggested the wire-rope casing for the insulated telegraph lines; he constructed most of the first submarine cables, and personally took part in the laying of many of them.

In all the ordinary activity of his life between the years 1849 and 1865, when he was personally superintending the construction, testing, and laying of the cables, he still had time and inclination for numerous distinct pursuits, chief amongst them being astronomy. There exists a series of drawings of the sun, made by Mr. Newall and continued by him through the years 1848–1852. He was married on February 14, 1849, to the youngest daughter of the late Mr. Hugh Lee Pattinson, F.R.S. Doubtless it was in great part the intimate connection with Mr. Pattinson following his marriage that kept Mr. Newall's scientific interests alive in these busy years. Astronomy was one of the many subjects in which they found common ground and took practical interest. Mr. Pattinson had a $7\frac{1}{4}$-inch equatoreal by Cooke of York: this was a large glass in those days, when a 15-inch was the largest

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